

Scaled data based on original data using  
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-  
State Lighting Products

Test Report Prepared for  
Cooper Lighting Solutions

Brand: CORELITE

Report Number: P854337

Luminaire Tested: SQ2-WBM-025U-125D-930-UNV-STD-W-4

Issue Date: 7/12/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P854337  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2104-222-9, G3-2104-222-8)  
Test Lab: INNOVATION CENTER  
Issue Date: 7/12/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ2-WBM-025U-125D-930-UNV-STD-W-4  
Description: CORELITE SQ2 SUSPENDED LED LUMINAIRE  
DOWNLIGHT 1250 LUMENS PER FOOT  
UPLIGHT 250 LUMENS PER FOOT  
Light Source: -  
Ballast/Driver: -

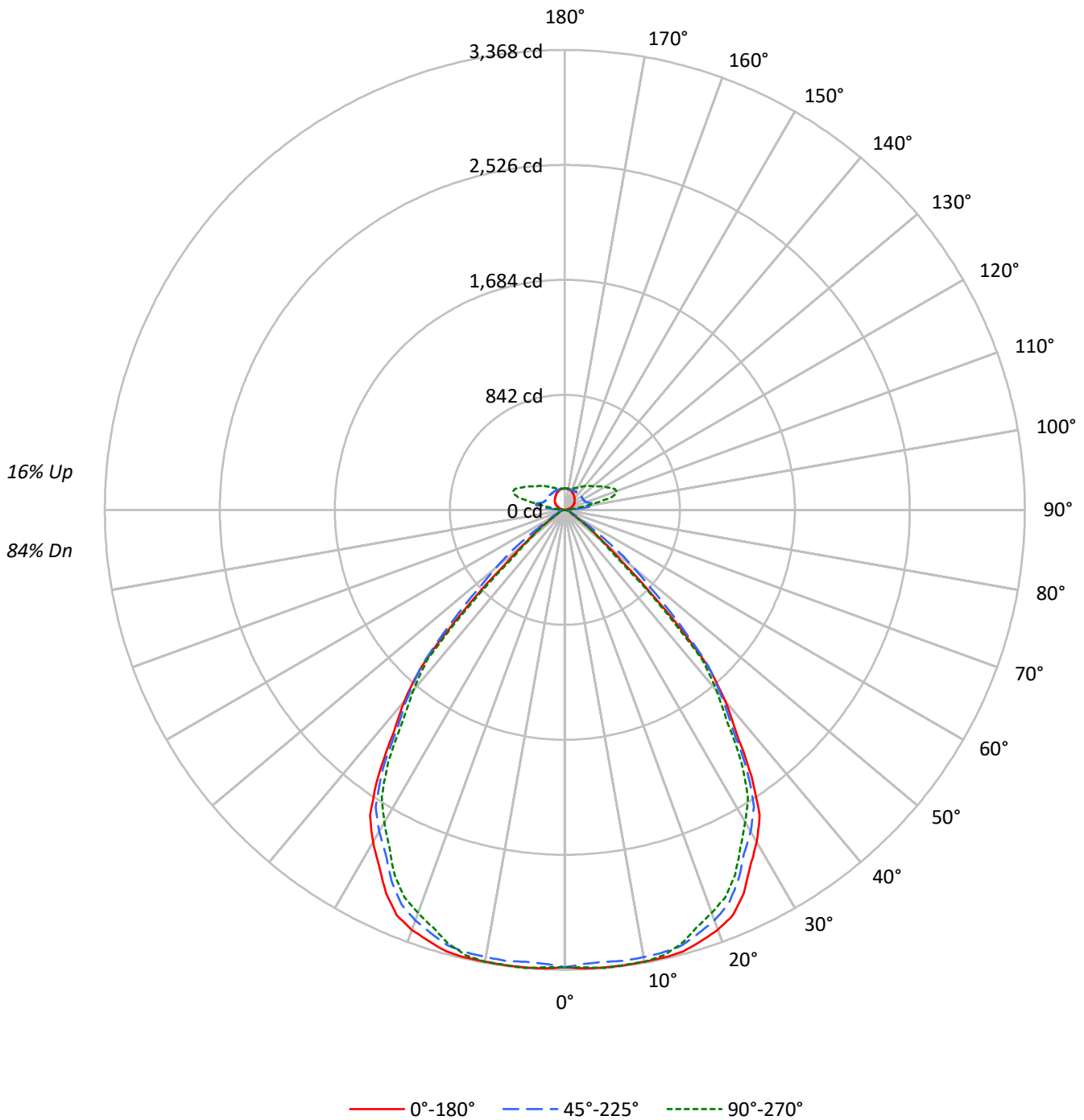
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6198.0 lumens  
Efficiency: N/A  
Efficacy: 108.5 lumens/watt  
Spacing Criteria (0/90/45): 1.23 / 1.18 / 1.17  
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')  
CIE Type: Semi-Direct  
  
Input Watts (W): 57.1  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT

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### Luminous Intensity Polar Plot





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**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20				20				20				20				20			
RC	80				70				50				30				10		0	
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10
RCR																				
0	115	115	115	115	111	111	111	111	102	102	102	95	95	95	88	88	88	84		
1	108	105	102	99	104	101	99	96	94	92	91	88	87	85	82	81	80	77		
2	101	96	91	87	98	93	88	85	87	83	80	81	79	76	76	74	72	70		
3	95	87	81	76	91	85	79	75	80	75	72	75	72	69	71	68	66	63		
4	89	80	73	68	85	77	71	67	73	68	64	69	65	62	66	62	60	57		
5	83	73	66	61	80	71	65	60	67	62	58	64	60	56	61	57	54	52		
6	78	67	60	55	75	65	59	54	62	57	53	59	55	51	56	52	49	47		
7	73	62	55	50	70	60	54	49	58	52	48	55	50	46	52	48	45	43		
8	68	57	50	45	66	56	49	45	53	48	44	51	46	43	49	45	42	40		
9	64	53	46	42	62	52	45	41	50	44	40	48	43	39	46	41	38	37		
10	60	49	43	38	59	48	42	38	46	41	37	45	40	36	43	38	35	34		

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	54077	54077	54077
5°	54501	53848	54579
10°	55085	54502	55100
15°	55968	55231	55005
20°	56244	54974	53983
25°	55184	53440	52533
30°	52361	50696	49264
35°	46952	45835	44415
40°	38545	37696	36320
45°	24103	27371	21866
50°	9530	16189	8518
55°	4622	7355	4569
60°	2170	3597	1986
65°	1945	2090	1872
70°	1902	1950	1770
75°	1859	1859	1678
80°	1785	1785	1609
85°	1593	1593	1593

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 45°  
 Vertical Angle: 45°  
 Luminance: 27371 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	320.0	5.2
10°-20°	935.4	15.1
20°-30°	1382.8	22.3
30°-40°	1428.9	23.1
40°-50°	859.8	13.9
50°-60°	206.6	3.3
60°-70°	56.4	0.9
70°-80°	31.4	0.5
80°-90°	10.2	0.2
90°-100°	63.0	1.0
100°-110°	196.0	3.2
110°-120°	191.7	3.1
120°-130°	156.5	2.5
130°-140°	128.0	2.1
140°-150°	99.9	1.6
150°-160°	72.1	1.2
160°-170°	44.1	0.7
170°-180°	14.9	0.2
0°-30°	2638.2	42.6
0°-40°	4067.2	65.6
0°-60°	5133.6	82.8
0°-90°	5231.7	84.4
90°-120°	450.7	7.3
90°-150°	835.2	13.5
90°-180°	966.0	15.6
0°-180°	6198.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	3349	3349	3349	3349	3349	
5°	3363	3352	3322	3369	3368	321
15°	3348	3374	3304	3305	3291	944
25°	3098	3121	3000	2957	2949	1416
35°	2382	2376	2325	2281	2253	1466
45°	1056	1198	1199	1133	958	818
55°	164	185	261	176	162	167
65°	51	54	55	51	49	52
75°	30	32	30	29	27	31
85°	9	10	9	9	9	10
90°	0	1	3	3	3	1
95°	9	25	116	43	28	10
105°	34	48	193	368	352	36
115°	61	72	157	323	378	60
125°	85	94	155	254	298	75
135°	102	113	154	219	246	79
145°	119	129	154	190	206	75
155°	137	141	155	170	176	63
165°	150	151	156	160	162	42
175°	156	156	156	157	156	15
180°	156	156	156	156	156	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	3349.3	3349.3	3349.3	3349.3	3349.3
2.5°	3361.6	3353.3	3327.0	3357.6	3352.4
5°	3362.7	3352.4	3322.4	3369.4	3367.5
7.5°	3362.2	3356.7	3331.2	3367.4	3360.1
10°	3359.9	3362.7	3324.3	3363.6	3360.8
12.5°	3358.3	3370.9	3320.5	3348.2	3340.8
15°	3348.3	3373.7	3304.2	3304.8	3290.7
17.5°	3311.8	3342.6	3252.5	3225.8	3207.9
20°	3273.4	3303.5	3199.5	3159.7	3141.8
22.5°	3213.5	3241.3	3125.7	3085.2	3070.4
25°	3097.6	3121.1	2999.7	2957.2	2948.8
27.5°	2941.5	2951.4	2839.8	2798.2	2783.8
30°	2808.5	2809.5	2719.2	2669.6	2642.4
32.5°	2654.1	2647.5	2577.8	2528.1	2494.1
35°	2382.1	2376.4	2325.4	2280.6	2253.4
37.5°	2062.4	2061.5	2012.8	1974.2	1946.8
40°	1828.8	1835.4	1788.5	1740.1	1723.2
42.5°	1549.1	1597.8	1557.9	1505.1	1494.2
45°	1055.6	1198.4	1198.7	1133.3	957.6
47.5°	603.8	757.8	862.7	667.9	495.8
50°	379.4	495.9	644.5	406.7	339.1
52.5°	269.5	326.6	477.0	286.1	253.0
55°	164.2	184.9	261.3	176.4	162.3
57.5°	99.5	118.9	151.4	118.3	99.9
60°	67.2	85.1	111.4	78.4	61.5
62.5°	59.6	66.1	87.6	61.7	55.3
65°	50.9	53.7	54.7	50.9	49.0
67.5°	45.0	46.8	45.9	44.9	42.1
70°	40.3	42.2	41.3	40.3	37.5
72.5°	35.7	37.6	36.7	35.7	33.6
75°	29.8	31.7	29.8	28.8	26.9
77.5°	23.1	24.7	23.8	23.0	21.1
80°	19.2	20.1	19.2	19.2	17.3
82.5°	15.4	15.6	14.6	14.6	13.4
85°	8.6	9.6	8.6	8.6	8.6
87.5°	3.1	3.3	3.6	3.6	2.9
90°	0.0	0.9	2.9	2.9	2.9
92.5°	3.1	10.7	36.5	12.0	9.7
95°	8.6	25.4	115.6	42.6	27.7
97.5°	15.7	33.0	191.4	119.2	75.1
100°	21.0	36.9	215.9	201.9	134.7
102.5°	26.4	41.5	211.3	288.4	226.4
105°	34.4	48.4	192.9	368.3	351.5
107.5°	42.4	55.5	175.4	374.5	393.0
110°	47.8	60.8	166.2	365.7	402.1



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	53.1	65.4	161.6	349.9	396.0
115°	61.1	72.3	156.6	323.1	378.2
117.5°	69.0	79.2	154.5	297.6	354.0
120°	73.5	83.8	153.8	283.0	337.2
122.5°	78.1	88.4	154.5	270.7	320.4
125°	85.0	94.3	154.7	254.1	298.0
127.5°	90.5	100.1	154.7	241.7	279.1
130°	93.6	103.9	154.7	234.8	268.4
132.5°	97.4	107.7	154.0	228.6	260.0
135°	102.2	113.4	153.8	219.3	246.4
137.5°	107.7	118.0	153.8	210.1	234.8
140°	110.8	121.1	153.8	204.0	226.4
142.5°	114.6	124.1	153.8	197.8	218.0
145°	119.4	128.7	153.8	189.5	206.3
147.5°	125.1	133.2	154.7	181.8	195.0
150°	128.9	135.5	154.7	177.9	188.2
152.5°	132.0	137.8	154.7	174.0	182.8
155°	136.6	141.3	154.7	170.1	175.8
157.5°	141.2	144.7	154.7	166.7	170.2
160°	144.2	147.0	154.7	164.4	167.2
162.5°	146.5	148.6	154.7	162.8	164.9
165°	150.0	150.9	155.7	160.5	162.4
167.5°	152.1	152.2	154.7	159.2	160.1
170°	152.8	153.8	154.7	157.6	158.6
172.5°	154.4	154.5	155.5	156.8	157.0
175°	155.7	155.7	155.7	156.6	155.7
177.5°	155.7	155.7	155.7	155.7	155.7
180°	155.7	155.7	155.7	155.7	155.7

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**CIE UGR TABLE:**

Reflectances:											
Ceiling		0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
Wall		0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3
Reference plane		0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Room dimensions		Viewed crosswise					Viewed endwise				
X=2H	Y=2H	9.70	10.67	10.32	11.28	11.97	9.37	10.34	9.99	10.95	11.64
	3H	10.23	11.09	10.86	11.70	12.43	9.89	10.75	10.52	11.37	12.09
	4H	10.50	11.30	11.16	11.93	12.68	10.13	10.93	10.79	11.57	12.31
	6H	10.74	11.47	11.40	12.11	12.86	10.34	11.07	11.01	11.72	12.47
	8H	10.81	11.50	11.49	12.17	12.92	10.41	11.11	11.09	11.77	12.53
	12H	10.85	11.51	11.54	12.17	12.95	10.46	11.12	11.14	11.77	12.55
4H	2H	9.74	10.53	10.39	11.17	11.91	9.43	10.23	10.09	10.87	11.61
	3H	10.48	11.13	11.15	11.80	12.56	10.17	10.82	10.84	11.49	12.25
	4H	10.89	11.47	11.57	12.15	12.94	10.54	11.12	11.22	11.80	12.59
	6H	11.26	11.76	11.97	12.46	13.27	10.89	11.39	11.59	12.09	12.89
	8H	11.39	11.86	12.10	12.56	13.37	11.01	11.48	11.72	12.17	12.99
	12H	11.47	11.89	12.20	12.61	13.43	11.09	11.51	11.82	12.23	13.05
8H	4H	10.97	11.44	11.68	12.14	12.95	10.65	11.12	11.36	11.82	12.63
	6H	11.47	11.85	12.21	12.59	13.41	11.12	11.50	11.86	12.25	13.06
	8H	11.67	12.01	12.43	12.76	13.59	11.32	11.66	12.07	12.41	13.24
	12H	11.84	12.14	12.59	12.87	13.77	11.48	11.78	12.23	12.51	13.41
12H	4H	10.95	11.36	11.68	12.09	12.90	10.64	11.05	11.36	11.78	12.59
	6H	11.48	11.82	12.23	12.57	13.40	11.14	11.48	11.90	12.23	13.06
	8H	11.73	12.03	12.48	12.76	13.66	11.38	11.68	12.13	12.42	13.31